

BOOK REVIEW

AQUATIC AND WETLAND PLANTS OF THE SOUTHWESTERN UNITED STATES¹

This large and extensively illustrated treatment of the aquatic and wetland flora of Oklahoma, Texas, New Mexico, and Arizona, published by the Environmental Protection Agency, is timely, for it emphasizes the importance of basic information about plants for water conservation and water quality studies and programs. The Corrells interpret the aquatic and wetland environment broadly so that it includes many habitats ecologically peripheral to the rivers, streams, lakes, marshes and swamps of the region. This scope is important because it stresses the totality of wet areas of a watershed — the wet meadows, bogs, and seepages that act as sponges to hold precipitation, the river and stream banks and floodplains that are important in erosional and depositional processes, as well as the lakes and rivers. The botany of the whole area involved in water quality and water use is thus included. The basic environmental message of this book — the integrity of the whole watershed and the basic role of plant life in its maintenance — should be appreciated by persons in charge of watershed protection and utilization.

The book is obviously important in another way, being a manual of a significant portion of the flora of the southwestern United States. The aquatic and wetland flora includes about 2100 species, representing 567 genera and 129 families. Most of the species grow in wet soil or in seasonally wet places. The Cyperaceae, Gramineae and Compositae are the dominant families, with a total of 590 species, rather few of them strictly aquatic. The wide range of plants brought into the treatment is also indicated, for example,

¹Donovan S. Correll and Helen B. Correll. *Aquatic and Wetland Plants of the Southwestern United States*, i-xv, pp. 1-777, figs. 1-789. Environmental Protection Agency. 1972. (Price \$7.75, Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402, Stock number 5501-0177).

by the presence of *Dodecatheon*, *Primula* and *Trifolium* (alpine springs and wet meadows), of *Marsilea* and *Elantine* (vernal pools), of *Populus* and *Salix* (borders of watercourses), and of *Amaranthus* (periodically inundated areas along rivers). The excellent illustrations of about 800 species, the keys, and the descriptions all facilitate accurate identification. The manual will have a wide use as a source of information about the species and for determinations. A printing error may be noted, the names on two figures have been reversed: Fig. 570 should be named *Myriophyllum pinnatum*, and Fig. 571 should be *Myriophyllum heterophyllum*.

This sizable volume adds to the impressive scope of works by Dr. Donovan Correll including books on the orchids of North America, on the potato and its wild relatives, on the ferns and fern allies of Louisiana, of Texas, and of Chihuahua, Mexico, as well as the most recent large publication on the flora of Texas (with M. C. Johnston). Dr. Helen Correll has contributed to the successful completion of these and has assumed a major role in the research and preparation of this publication on aquatic and wetland plants. This book by the Corrells is an important source of information on plants of the southwestern United States and will be especially useful for environmental studies related to water resources.

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